

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

130. A. A. Il'yushin (Moscow): Problems of the theory of plasticity under confined loading.
131. V. L. Koshlakov (Leningrad): Elastic-plastic vibrations of rods of non-circular cross section.
132. V. L. Koshlakov (Leningrad): The forced non-linear flexural vibrations of a homogeneous prismatic rod and a very long rectangular plate.
133. A. A. Il'yushin (Moscow): On a method of solving the equations of elastostatics for a homogeneous isotropic medium in the presence of a magnetic field.
134. E. A. Ginzburg, P. A. Zhuravskiy (Moscow): An engineering method for the design of open prismatic shells.
135. V. L. Koshlakov (Leningrad): The distribution of vertical compressive stresses and strains in foundations in homogeneous or stratified soils.
136. E. A. Ginzburg (Moscow): Bending of cantilever plates of variable stiffness.
137. E. A. Ginzburg (Moscow): The effect of aging and anisotropy on the strength of concrete.
138. E. A. Ginzburg (Leningrad): On the time of rupture in creep.
139. E. A. Ginzburg (Leningrad): On some variational principles and methods in the theory of plasticity.
140. E. A. Ginzburg (Moscow): A procedure of determining an impact resistance diagram for large deformations.
141. E. A. Ginzburg (Moscow): Some generalizations of the formulae of elastostatics and elastodynamics contact problems and solutions for their solution.
142. A. A. Il'yushin (Moscow): The flow of a viscoplastic medium in a magnetic field.
143. E. A. Ginzburg (Leningrad): On the elastic equilibrium of thin elastic orthotropic plates.
144. E. A. Ginzburg (Moscow): Results of the influence of the magnetic field on the stability of the bending of thin elastic plates and shells.
145. E. A. Ginzburg (Moscow): On the stability of the bending of thin elastic plates and shells in a magnetic field.
146. E. A. Ginzburg (Moscow): On the stability of the bending of thin elastic plates and shells in a magnetic field.
147. E. A. Ginzburg (Moscow): On the stability of the bending of thin elastic plates and shells in a magnetic field.
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169. E. A. Ginzburg (Moscow): On the stability of the bending of thin elastic plates and shells in a magnetic field.
170. E. A. Ginzburg (Moscow): On the stability of the bending of thin elastic plates and shells in a magnetic field.

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S/140/61/000/005/002/007
C111/C222

AUTHORS: Kondrat'yev, A. S., and Ustinova, T. J.

TITLE: The solution of the problem on the oscillation properties of the vibrations of buckling bars

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, no. 5, 1961, 19-22

TEXT: In (Ref. 2: A. S. Kondrat'yev, Z. S. Chaykina: Ostsillyatsionnyye svoystva prodol'no-szhatogo sterzhnya [Oscillation properties of a buckling bar] PMM, 21, vyp. 4, 1957) it was shown that the influence function $H(x,s; P)$ of a buckling bar for all boundary conditions has the oscillation property if the acting load is not greater than the least eigenvalue of a certain boundary value problem. In the present paper the authors give a complete solution of the problem, i. e. it is shown that the influence function has the oscillation property for all values of P being smaller than the first critical load. This solution is complete inasmuch as for $P > P_{krit I}$ the straight-line equilibrium form becomes instable and oscillations around it are impossible. - There are 3 Soviet-bloc references.

SUBMITTED: April 6, 1959

Card 1/1

KONDRAT'YEV, A.S.; USTINOVA, T.I.

Solution of the problem of the oscillatory properties of
vibrations arising in longitudinally compressed rods. Izv.vys..
ucheb.zav.; mat. no.5:19-22 '61. (MIRA 14:10)

1. Kuybyshevskiy industrial'nyy institut.
(Elastic rods and wires) (Boundary value problems)

ACCESSION NR: AP3002890

S/0054/63/000/002/0027/0036

AUTHORS: Kondrat'yev, A. S.; Pavinskiy, P. P.

TITLE: Step structure in absorption spectra of excitons in copper oxide

SOURCE: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 2, 1963, 27-36

TOPIC TAGS: ion, crystal lattice, absorption band, dipole, quadrupole, phonon, exciton

ABSTRACT: The general motion of ions in a crystal lattice has been studied with constant a and N spinless nuclei. The wave and energy equations for the fundamental state of the crystal have been derived. Specifically, the step structure of Cu_2O has been investigated in the absorption band formation, including the effects of both dipole and quadrupole transitions. The resulting mathematical expressions indicate that quadrupole transitions with production and destruction of phonons cannot be neglected when compared to dipole transitions. The main features of the part of absorption band contiguous to the exciton line $n = 1$ in Cu_2O may be interpreted theoretically as being due to the additional phonon excitation in the lattice. Orig. art. has: 45 equations.

Card 1/2

ACCESSION NR: AP3002890

ASSOCIATION: none

SUBMITTED: 01Dec62

DATE ACQ: 24Jul63

ENCL: 00

SUB CODE: PH

NO REF SOV: 007

OTHER: 001

Card 2/2

POPOV, B.M.; VINOGRADOVA, L.I.; KONDRAT'YEV, A.S.

Injector for a cyclotron. Uskoriteli no.6:112-115 '64.
(MIRA 18:2)

KOBUSHKIN, Viktor Kirillovich; KONDRAT'YEV, Aleksandr Sergeevich;
PRIYATKIN, Nikolay Aleksandrovich; TSAR'KOVA, Z.I., red.

[Collection of problems in physics; in aid of persons
enrolling in schools of higher learning] Sbornik zadach
po fizike; v pomoshch' postupaiushchim v vysshe uchebnye
zavedeniia. Leningrad, Izd-vo Leningr. univ., 1965. 84 p.
(MIRA 19:1)

KONDRAT'YEV, A. T.
6697.

Ratsionalizatsiya Proizvodstva. (Mashinostroit. Zavody. Pens. Obl.) Pensa, Kn. Izd.)
1954. 160 s. s. Chert. 20 sm. 3.000 Ekz. 3 r. 80 K. V Per.-(55-2917)P 621.80

SO:KNIZHNAYA LETOPIS 'NP. 6, 1955

KONDRAT'YEV, A. T.
DOLGIY, M.A.; KONDRAT'YEV, A.T.

Review of school activities. Pis. v shkole 17 no.3:95-96 My-Je '57.
(MLBA 10:6)

1. 1-ya Razenskaya srednyaya shkola (for Dolgiy). 2. Institut
usovershenstvovaniya uchiteley, Penza (for Kondrat'yev).
(Physics--Study and teaching)

KONDRAT'YEV, A. (Penza).

Seminar and practicum for mathematics teachers of grades 8-10.
Mat. v shkole no.2:93 Mr-Apr '98. (MIRA 11:2)
(Mathematics--Study and teaching)

L 8479-66

ACC NR: AP5028494

SOURCE CODE: UR/0286/65/000/020/0067/0067

AUTHORS: Kondrat'yev, A. V.; Kovrigin, A. A.; Shevchenko, L. Ya. 29

ORG: none 44 44 44 13

TITLE: A precision unit for linear geodetic measurements. Class 42, No. 175662
 [announced by Moscow Institute of Engineers of Geodesy, Aerophotography, and
 Cartography (Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i
 kartografii)] 9m

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 67

TOPIC TAGS: geodesy, surveying instrument, measuring apparatus, GEODETIC
 INSTRUMENT 44

ABSTRACT: This Author Certificate presents a precision unit for linear geodetic measurements. The unit contains a sheave supporting a loaded thread, and two lateral flanges. A precision ball bearing is mounted in each of these flanges coaxially with the sheave (see Fig. 1). To increase the sensitivity of the unit, other ball bearings are pressed into the sheave coaxially with the precision bearing. A knife is mounted inside the second bearings, with its supports pressed into the precision bearings. A space in the knife blade is filled with a

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UDC: 528.5-187.4

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L 8479-66

ACC NR: AP5028494

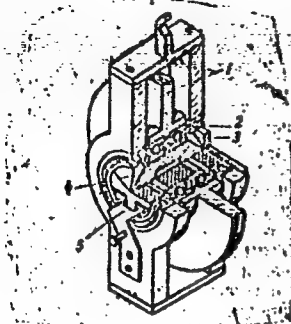


Fig. 1. 1 - Sheave; 2 - precision
bearings; 3 - bearings;
4 - knife; 5 - supports.

balancing mass which lowers the center of gravity of the knife. Orig. art. has:
1 figure.

SUB CODE: 08 / SUBM DATE: 29Jul64

BVK.

Card 2/2

KONDRAT'YEV, B.A.; LAPSHINA, T.M.; NIKISHOV, M.I.; SOLOV'YEV, A.I., redaktor;
~~SHCHERBOV, T.A.~~, redaktor; KUZ'MIN, G.M., tekhnicheskiy redaktor.

[Work manual to accompany the atlas of foreign countries for secondary schools] Pособie k rabote s geograficheskim atlasom zarubeshnykh stran dlia srednei shkoly. Moskva, Izd-vo geodesicheskoi lit-ry, 1956. 54 p.
(Atlases) (MLBA 9:6)

GEDMONOV, A.A.; KONDRAT'YEV, B.A.

Lessons on the subject "Population of the world" in the fifth
class. Geog.v shkole 19 no.2:51-56 Mr-Ap '56. (MLRA 9:7)
(Geography--Study and teaching)

KONDRAT'YEV, B.A.; DOBRZHITSKIY, B.S.; RODIONOVA, F.A., red.; SMIRNOVA, M.I.,
tekhn. red.

[Lessons in geography for the fifth grade; based on experience]
Uroki geografii v piatom klasse; iz opyta raboty. Moskva, Gos.
uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1957. 230 p.
(Geography—Study and teaching) (MIRA 11:7)

GEDEONOV, A.A.; KONDRAT'YEV, B.A.

Graphic work in the study of geography in the 5th grade. Geog. v
shkole 21 no. 4:46-53 J1-Ag '58. (MIRA 11:7)
(Geography--Graphic methods)

KONDRAT'YEV, B.A.

Television as an aid to the expansion of geographical knowledge.
Geog. v shkole 23 no. 6:43-45 M-D '60. (MIRA 13:11)

1. 315-ya shkola g.Moskvy.
(Geography--Study and teaching)
(Moscow Province--Television in education)

SOKOLOV, V.M. Prinimal uchastiye MYSHETSKAYA, Ye.N.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.; BIBIK, A.Ye., red.; ZASLAVSKIY, I.I., red.; KONDRAT'YEV, B.A., red.; MYASISHCHEVA, Ye.I., red.; SOLOV'YEV, A.I., red.; SIROYEV, K.F., red.; SCHASTNEV, P.N., red.; TANANKOVA, A.I., red.; TEREKHOV, N.M., red.; LOBZOVA, N.A., red.

[Atlas of Moscow Province] Atlas Moskovskoi oblasti. Moskva, 1964. 12 p. (MIRA 18:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

LESHCHUK, I.A.; KONDRAT'YEV, B.P.

Measuring unbalance in communication equipment. *Elektresviaz'* 10
no.3:75-78 Mr '56. (MLRA 9:7)
(Electric measurements)

Y
KONDRAT'EV, B. K.

O znaniakh i samoletnom oborudovanii, [On beacons and aircraft equipment].
(Grazhdanskaia aviatsiia, 1937, no. 4-5, p. 12-16). DLC: TL504.G7

SO: Soviet Transportation and Communication. A Bibliography. Library of Congress,
Reference Department, Washington, 1952, Unclassified.

KONDRAT'YEV, B. ^Kpilot I klassa.

Change the arrangement of blind landing instruments. Grashd.sv.
13 no.5:17 My '56. (MLRA 9:9)
(Aeronautical instruments)

S/058/63/000/003/089/104
A059/A101

AUTHORS: Kondrat'yev, B. V.

TITLE: The dispersion properties of a helical waveguide placed into an anisotropic magnetodielectric medium

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 27, abstract 3Zh160 ("Uch. zap. Khar'kovsk. un-t", 1962, v. 121, Tr. Radiofiz. fak., v. 5, 19 - 25)

TEXT: The dispersion equation of a helical tape placed at the interface between two different anisotropic media has been obtained. The current density distribution on the tape is considered to be known in this case. It is shown that the anisotropy of the medium leads to an increase in delay.

[Abstracter's note: Complete translation]

Card 1/1

SHESTOPALOV, V.P.; KONDRAT'YEV, B.V.

Space resonance in a helical wave guide located in a magnetodi-
electric medium. Zhur.tekh.fiz. 29 no.12:1434-1456 D '59.
(MIRA 14:6)

1. Khar'kovskiy Gosudarstvennyy Universitet imeni A.M.Gor'kogo.
(Wave guides)

KONDRAT'YEV, B.V.

Electron beam in a helical wave guide (taking the size of the helix into consideration). Zhur.tekh.fiz. 29 no.12:1477-1480 D '59.
(MIRA 14:6)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Wave guides) (Electron beams)

9(6),9(9)
AUTHORS:

Shestopalov, V. P., Kondrat'yev, B. V. SOV/20-125-4-28/74

TITLE:

Space Resonance in a Spiral-shaped Wave Guide
Placed in a Magnetodielectric Medium (Prostranstvennyy rezonans v spiral'nom volnovode, pomeshchennom v magnitodielektricheskuyu sredu)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 794-797 (USSR)

ABSTRACT:

The conditions of zero-th and spatial n-th resonance for a spiral wave guide in free space are $h_0 \ll 2\pi/d$, $h_0 \approx (2\pi/d)n$ ($n = 1, 2, \dots$). Here $h_0 = \omega/v$ denotes the wave number; ω - the cyclic frequency; d - the spacing of the spiral; v - the phase velocity of the wave in the spiral. The expressions mentioned may be written down also as follows: $d \ll \lambda_g$; $d \sim n\lambda_g$ ($n = 1, 2$), where λ_g denotes the wave length in the spiral wave guide. At high frequencies the above equations may be expressed immediately by the main parameter of the spiral, viz. by the winding angle θ : $d \ll \lambda_0 \sin \theta$;

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Placed in a Magnetodielectric Medium

SOV/20-125-4-28/74

$d \sim n\lambda_0 \sin \theta$. Here λ_0 denotes the wave length in free space.

For the purpose of determining the conditions of spatial resonance of spiral wave guides located in a magnetodielectric medium, it is necessary to find the dispersion equation for the waves in such a delaying system. It is necessary, in this connection, to distinguish between two possible cases for the arrangement of the magnetodielectric medium with respect to the spiral: 1) There is no interspace between the spiral and the magnetodielectric which is coaxial to it. 2) There is direct contact between the spiral and the magnetodielectric. First, the rather voluminous dispersion relation for the first case is derived; some of the curves plotted according to this dispersion relation are shown by a diagram. In the second case (direct contact between spiral and magnetodielectric) the boundary conditions on the spiral are differently shaped than in the first case. Conditions are also written down for the components of the electric field along the spiral. Next, the complete system of the boundary conditions of the problem is written down in the cylindrical system of coordinates, and herefrom the dispersion equation for the waves in this system

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is derived and also specialized for high frequencies. By means of this dispersion relation, it is possible to express the phase velocity v' of the delayed wave in explicit form by quantities which characterize the properties of the medium and of the spiral. In this case v' does not depend on frequency, and this facilitates explicit formulation of the condition of spatial resonance for a wave guide located in a magnetodielectric medium. This condition has the form $d \ll \lambda_0 \sin \theta$, $d \sim n \lambda_0 \sin \theta$. The second diagram shows the dispersion curves calculated for various values of ϵ for the second of the aforementioned two cases. In the first case, the waves are delayed mainly by the spiral, and in the second, however, delay is caused both by the spiral and by the dielectric. The magnetodielectric increases not only the delay, but it also narrows the forbidden zones within which only fast waves are propagated. There are 2 figures and 7 references, 6 of which are Soviet.

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Space Resonance in a Spiral-shaped Wave Guide
Placed in a Magnetodielectric Medium

SOV/20-125-4-28/74

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo
(Khar'kov State University imeni A. M. Gor'kiy)

PRESENTED: January 5, 1959, by M. A. Leontovich, Academician

SUBMITTED: January 2, 1959

Card 4/4

26801

S/142/61/004/002/003/010

E033/E435

9,4230

AUTHORS: Shestopalov, V.P., Kondrat'yev, B.V., Slyusarskiy, V.A.

TITLE: An electron beam in a coaxial ~~spiral~~ line with an anisotropic magneto-dielectric medium

PERIODICAL: Izvestiya vysshikh uchebnykh zavodov, Radiotekhnika, 1961, Vol.4, No.2, pp.155-164

TEXT: The propagation of electromagnetic waves in a coaxial, spiral line with an electron beam is investigated; the space between the spiral and the outer sheath being filled with an anisotropic magneto-dielectric medium. The article is divided into seven sections:

1. The spiral line consists of three ($i = 1, 2, 3$) regions:
 $i = 1 (0 \leq r \leq a)$ inside which a continuous, cylindrical, mono-energetic, electron beam is propagated along the z axis of the system; $i = 2 (a \leq r \leq b)$ the region between the beam and the spiral; $i = 3 (b \leq r \leq r_0)$ the region between the spiral and the sheath, which is filled with the anisotropic magneto-dielectric medium; ($r = a, b, r_0$ are the radii of the beam, of the spiral and of the sheath respectively; j_z is the beam current density).

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By using the field equations and the equation of motion of the charge and assuming small signals, the first relationship between the propagation constant h_n and the separation constant of the variables χ_n is obtained (from previous works quoted in the references)

$$(h_n^2 - \chi_n^2)(h_n - k_0)^2 = \frac{k_0}{k_1} \eta s (h_n^2 - k_1^2) \quad (1)$$

where $\eta = \sqrt{\mu_0/\epsilon_0}$; $k = \omega/c$; $k_1^2 = k^2 \epsilon_0 \mu_0$; ϵ_0 and μ_0 are the dielectric permittivity and magnetic permeability of the medium; $k_0 = \omega/v_0$, the wave number, corresponding to the mean velocity of the electrons v_0 ; $s = (4\pi/c)(j_0/2U_0)$, where U_0 is the constant potential difference given by $v_0^2 = (2e/m)(U_0)$; e is the charge and m the mass of an electron. The total current $j_z \equiv f_t \equiv j_0 (j_z = j_\varphi = 0)$. The index $n = 1, 2, 3, 4$ indicates the number of the solution of the differential equation for h_n and χ_n . The propagation constant h_n determines the nature of the electromagnetic wave propagated in the line.

2. Expressions for the longitudinal components of the electric

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and magnetic fields in regions $i = 1, 2$ are obtained. The remaining components of the fields are derived from the longitudinal components. The longitudinal components of the electric and magnetic fields in region 3 are obtained by using the diagonal tensors $\epsilon_{ik} = (\epsilon_r, \epsilon_\phi, \epsilon_z)$ and $\mu_{ik} = (\mu_r, \mu_\phi, \mu_z)$. The remaining components of the electro-magnetic fields in this region are derived from the longitudinal components.

3. To determine the propagation constants h_n and χ_n , the dispersion equation of the system is first obtained by using the boundary conditions at the surfaces of the beam, of the spiral and of the sheath for each of the n components of the fields. At the boundary of the electron beam, the condition of continuity of the tangential components of the electromagnetic field must be observed; at the surface of the sheath, these components must equal zero. At the surface of the spiral waveguide (assuming an equivalent isotropic-conducting cylinder), the tangential components of the electric field are zero and the components of the magnetic field inside and outside the spiral in the direction of its conductivity are continuous. From these conditions, the

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amplitudes of the fields are expressed as $A_{1n} \equiv E_{nz}(0)$, the strength of the longitudinal components of the electric field along the axis of the system. Thence, the dispersion equation is obtained. It is shown that the dielectric properties of the medium have much greater effect on the interaction of the field and the beam than the magnetic properties.

4. The simplified asymptotic form of the dispersion equation is used to find the value of the retardation. It is shown that the conditions for space-resonance for a spiral waveguide in an anisotropic medium are analogous to the same conditions for an isotropic magneto-electric. At low frequencies, the interaction of the waves with the beam is small.

5. The asymptotic form of the dispersion equation is also used for the case when $a \approx b \ll r_0$. Since a weak beam introduces very little change into the system, the excitation theory may be applied and equations for the reverse and forward waves obtained. The cubic equation for the forward wave gives three solutions and four sets of propagation parameters (one set for the reverse wave h_1, χ_1 , and three sets $h_{2,3,4}, \chi_{2,3,4}$ for the forward waves) are obtained. These show that the amplitudes of the waves with

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propagation constants h_1 and h_2 are constant, but waves with h_3 and h_4 have amplitudes which change proportionally to $\exp(\pm z \cdot \text{Im} h_{3,4})$. The amplitude change depends on the current density and on the parameters of the medium. The phase velocities are also investigated.

6. The power "fluxes" inside the spiral and between the spiral and the sheath are next investigated and simplified asymptotic expressions obtained. At high frequencies and with no sheath the total power flow is proportional to the general dielectric permittivity and inversely proportional to the permeability. The distribution of power inside and outside the spiral is investigated and comparisons made of the power "fluxes" in systems with an anisotropic magneto-dielectric and with a vacuum, with and without a sheath, at high and at low frequencies.

7. Finally, expressions are obtained for the wave and coupling impedance. It is shown that at high frequencies, the coupling impedance decreases with frequency but increases with increase in beam diameter. At low frequencies the coupling impedance is very much higher than at high frequencies. There are 12 Soviet references.

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ASSOCIATION:

Kafedra radiofiziki
Khar'kovskogo gos. universiteta im. A.M.Gor'kogo
(Department of Radio-physics of the Khar'kov State
University imeni A.M.Gor'kiy)

SUBMITTED: March 7, 1960

Card 6/6

9.4230S/185/61/006/001/005/011
D210/D305

AUTHOR: Kondrat'yev, B.V.

TITLE: An electron beam in a coaxial helical line (allow-
ance for geometrical dimensions of the helix)

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 1, 1961,
77-85

TEXT: The author studied theoretically the propagation of electro-
magnetic waves in a coaxial helical line with an electron beam pass-
ing along the axis of the helix. Propagation of electromagnetic
waves is approached by means of averaged-out boundary conditions on
the helix which allow for the geometrical dimensions of the helix
and its periodic properties; this is not possible if the helix is
simply replaced by an anisotropic cylinder. The coaxial helical
line is divided into three regions denoted by $i = 1, 2$ or 3 :
 $i = 1$ ($0 \leq r \leq a$) which is the region occupied by a dense cylindri-
cal monoenergetic electron beam; $i = 2$ ($a \leq r \leq b$) which is the
region between the beam and the helix itself; $i = 3$ ($b \leq r \leq r_0$)

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D210/D305

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which is the region between the helix and an outer screen; here a , b and r_0 denote the radii of the electron beam, the helix and the screen. The helix is taken to be a strip, $2l$ wide, wound round an imaginary cylinder of radius b . Using Maxwell's equations and equations of motion of a charge in the small-signal approximation, it is shown that the electromagnetic phase velocity increases and the amplitude decreases with increase of the strip width. The energy flux (the Poynting vector) is found within the helix and between the helix and the screen; it is shown to be affected by the presence of the electron beam but, at high frequencies, it is not greatly influenced by the geometry of the helix. The high-frequency wave impedance is also practically unaffected by the helix geometry; this impedance decreases with frequency and increases with electron beam intensity. There are 10 Soviet-bloc references.

ASSOCIATION: Kharkivs'ky derzhavnyy universytet im. O.M. Hor'koho (Khar'kov State University im. A.M. Gor'kiy)

SUBMITTED: March 2, 1960

Card 2/2

ACCESSION NR: AR3000174

S/0274/63/000/004/A054/A054

SOURCE: RZh. Radiotekhnika i elektrosvyaz'; Abs. 4A332

AUTHOR: Kondrat'yev, B. V.; Slyusarskiy, V. A.

TITLE: Computation of losses in coaxial helical line filled with anisotropic magnetodielectric medium of finite conduction

CITED SOURCE: Uch. zap. Khar'kovs. un-t. Tr. Radiofiz. fak., v. 121, no.5, 1962, 26-31

TOPIC TAGS: energy losses; anisotropic magnetodielectric medium; helical waveguide; electromagnetic field

TRANSLATION: Problems are considered which involve losses brought about by an anisotropic magnetodielectric medium placed within a helical waveguide of coaxial type. An analysis is made of the instance of an axial anisotropy of the medium; the condictions of the media are assumed to be

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ACCESSION NR: AR3000174

very low, and losses at metallic surfaces are disregarded. The problem is being solved for symmetrical electromagnetic waves. Determinations are made of: transversal and axial components of the electromagnetic field; dispersion equation of the system; amplitudes of the fields; losses due to filling of the waveguide under consideration with anisotropic magnetodielectric medium. Orig. art. has: 6 references. A. M.

DATE ACQ: 16May63 ENCL: 00

SUB CODE: 00

Card 2/2

33551

S/135/62/000/002/007/010
A006/A101

1.2300

1573

AUTHORS: Kondrat'yev, B. V., Novikov, N. Ya., Andreyev, I. I., Engineers

TITLE: Pipewelding with the aid of television technique

PERIODICAL: Svarochnoye proizvodstvo, no. 2, 1962, 30

TEXT: To assure high-quality internal pipe welds, the Khartsyzsk Pipe Plant employed a ПТВ-ОМ1 (PTU-OM1) type television set on a machine intended for the high-speed two-sided welding of internal pipe joints. The TV set assures the necessary accuracy of image transmission. The transmission camera is equipped with lens Ю-3 (Yu3). It is rigidly connected with the welding torch and directed toward the edges of the blank to be welded. The device is designed in such a manner that the distance between the edge butt and the lens varies only slightly when welding pipes of various diameters. To eliminate the effect of distance variations, the lens is diaphragmed. The sight, which must coincide with the edge butt of the blank on the screen, is glued directly on the ЛМ-23 (LI-23) vidicon. The receiving TV set is built into the control desk containing the control mechanisms and the buttons to correct the location of the blank and to make the edge butts of the blank coincide with the sight axis and the

Card 1/2

33551

S/135/62/000/002/007/010

A006/A101

Pipewelding with the aid of television technique

electrodes. Due to the tenfold magnification of the lens, even insignificant deviations of the edges from the required position can be observed. To assure 24-hour operation of the machine, both the transmission and the receiving camera are cooled with compressed air. The butt is illuminated (200 - 300 lux) by two 50-watt tubes. The use of TV for the internal welding of pipes raises the reliability of the weld joints, reduces rejects due to poor fusion and shifted welds, increases the welding speed, and facilitates operation. There are 2 figures. X

ASSOCIATION: Khartsyzskiy trubnyy zavod (Khartsyzsk Pipe Plant)

Card 2/2

20172
S/109/62/001/003/015/029
D266/D302

9.4230 (1532, 3304)

AUTHORS: Shestopalov, V.P., Slyusarskiy, V.A., and
Kondrat'yev, B.V.

TITLE: Electron beam in a helix with anisotropic dielectric

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 3, 1962,
475 - 482

TEXT: The purpose of the paper is to study theoretically and experimentally the effect of an anisotropic dielectric on the properties of a helicoidal waveguide. The helix is surrounded by a dielectric whose permittivity components are denoted by ϵ_z , ϵ_r and ϵ_ϕ .

Assuming an axially symmetric solution - and small signal conditions in the beam - the electric and magnetic intensities are obtained in the regions (i) $0 \leq r \leq a$, (ii) $a \leq r \leq b$ and (iii) $b \leq r \leq R$. The solutions are matched on the boundaries leading to a dispersion equation containing a large number of different Bessel functions. Plotting the right-hand side of the dispersion equation for several different geometries it is found that a function of the

Card (1/3)

S/109/62/007/003/015/029
D266/D302

Electron beam in a helix with ...

$$F(\beta) = C \frac{\beta - \beta'}{\beta - \beta''} \quad (12)$$

form gives a good approximation (β is the axial propagation coefficient and C , β' , β'' are constants depending only on the geometry of the structure). Assuming furthermore that $\Gamma_a \ll 1$ (i.e. the electric intensity is constant across the beam) the following simplified equation is obtained for β ,

$$\left(1 - \frac{v_0}{c} \frac{\beta}{\beta_0}\right)^2 (1 - 20C \frac{\beta - \beta'}{\beta - \beta''}) - \frac{j}{\epsilon_0 \gamma \beta^2 v_0^2 c^2} = 0 \quad (13)$$

where v_0 - beam velocity, c - velocity of light, j - beam current, $\beta_0 = \omega/v_0$, ω - frequency. It can be shown that (13) is equivalent to a third order equation in β , demonstrating that in the presence of the electron beam three waves propagate in the direction of the electron flow. Solving (13) for $\epsilon_z/\epsilon_r = 5$ and 0.5 the imaginary part of β is plotted against v_0/c . The gain is considerably higher

Card 2/3

KONDRAT'YEV, B.V., inzh.; ROZZUVAYEV, A.S., inzh.

Technological processes for manufacturing machine parts of compressed wood. Mashinostroenie no.2:87-89 Mr-Ap '62. (MIRA 15:4)

1. Khartsyzskiy trubnyy zavod.
(Wood, Compressed) (Woodwork)

KONDRAT'YEV, B.V., inzh.; NOVIKOV, N.Ya., inzh.; ANDREYEV, I.I., inzh.

Application of television techniques to pipe welding. Svar.
proizv. no.2:30 F '62. (MIRA 15:2)

1. Khartayskiy trubnyy zavod.
(Pipe, Steel Welding)
(Industrial television)

KONDRAT'YEV, B.V. [Kondrat'iev, B.V.]

Various methods for calculating dispersion in a helical wave guide
with an anisotropic magnetodielectric medium. Ukr. fiz. zhur. 8
no.8:844-854 Ag '63. (MIRA 16:11)

1. Khar'kovskiy gosudarstvennyy universitet im. Gor'kogo.

KONDRAT'YEV, B.V.

Effect of the width of the spiral band on the amplification
in a traveling-wave tube. Ukr. fiz. zhur. 8 no.11:1203-1212
N '64. (MIRA 17:9)

SALUKVADZE, V.S.; KONDRAT'YEV, B.V.; PLASTININ, B.N.

Protective coating of steel pipes. Stal' 23 [i.e. 24] no.4:
340-342 Ap '64. (MIRA 17:8)

S/0057/64/034/002/0374/0376

ACCESSION NR:AP4013433

AUTHOR: Vishnevetskiy, M.Z.; Kondrat'yev, B.V.; Solov'yeva, V.N.

TITLE: Concerning phase velocity reduction in a helix waveguide

SOURCE: Zhurnal tekhn.fiz., v.34, no.2, 1964, 374-376

TOPIC TAGS: waveguide, helical waveguide, helix waveguide, phase velocity, phase velocity reduction, dispersion

ABSTRACT: The phase velocity in a helix waveguide is investigated. The waveguide is constructed in the form of a coaxial cable with an inner helical conductor and an outer cylindrical conductor. To investigate the effect of the presence of the outer cylindrical conductor on the phase velocity, the inner helical conductor is treated as an anisotropically conducting cylinder. The dispersion equation is written, and it is found that the presence of the outer conductor reduces the phase velocity and that the dispersion of the symmetric wave remains normal for all values of the radius of the outer conductor. The effect of the diameter (or width) of the wire (or strip) of which the helix is wound is investigated with the aid of a dispersion equation derived by V.P.Shestopalov and B.V.Kondrat'yev (ZhTF 29, No.12,

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ACCESSION NR: AP4013433

1434,1959) from average boundary conditions on the helix. It is found that the velocity of the symmetric wave increases (particularly at the higher frequencies) with decreasing separation between the turns of the helix, i.e., with increasing ratio of wire diameter to helix pitch. Both calculations are extended to the first asymmetric wave. The propagation velocities of the right and left hand helical waves are very nearly the same. Orig.art.has: 6 formulas and 3 figures.

ASSOCIATION: Khar'kovskiy gosuniversitet im.A.M.Gor'kogo (Kharkov State University)

SUBMITTED: 18May63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: PH

NR REF SOV: 004

OTHER: 000

2/2
Card

ACCESSION NR: AP4042931

S/0057/64/034/008/1436/1440

AUTHOR: Kondrat'yev, B.V.

TITLE: On the delay in a helical waveguide in an anisotropic medium

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1436-1440

TOPIC TAGS: waveguide, helical waveguide, anisotropic medium, wave propagation

ABSTRACT: The propagation of waves in a helical waveguide containing four different anisotropic dielectrics is discussed. The first dielectric is in the form of a cylinder of radius less than that of the helix and coaxial with it; the second occupies the space between the first and the helix; the third occupies the space between the helix and a cylindrical surface coaxial with it and of greater radius; and the fourth dielectric occupies the space between the third and the outer cylindrical conductor. The dielectric tensor of each medium, as well as its permeability, is assumed to be diagonal in cylindrical coordinates, with the radial and azimuthal components equal. The dispersion equation was derived and, since it is very unwieldy, it was simplified with the aid of the fact that the propagation velocity is very low. The simplified version (still quite cumbersome) is presented. The propagation

1/2

ACCESSION NR: AP4042931

velocity was calculated as a function of frequency for two special cases and for numerous values of two parameters, and the results are presented graphically. The special cases considered are those in which either only the second dielectric medium, or only the third, is present and has permeability unity and longitudinal dielectric constant two. The parameters varied are the radius of the dielectric (the inner radius in the one case and the outer in the other) and the ratio of the longitudinal to the transverse component of the dielectric tensor. In each case curves are given for the first three spatial resonances. It is concluded that the delay is greater in a system with anisotropic media than in one with isotropic media, particularly if the longitudinal dielectric constant or permeability is less than the transverse. Orig.art.has: 22 formulas.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im.A.M.Gorkogo (Khar'kov State University)

SUBMITTED: 24Oct63

SUB CODE: EM,EC

NR REF SOV: 004

ENCL: 00

OTHER: 002

2/2

L 2310-66 EWT(1)/EWA(h)

ACCESSION NR: AP5020734

UR/0057/03/035/003/1447/1450

AUTHOR: Kondrat'yev, B.V.

TITLE: Power flux in a helical waveguide with anisotropic filling

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 8, 1965, 1447-1450

TOPIC TAGS: helical waveguide, dielectric waveguide, waveguide propagation, anisotropic medium

ABSTRACT: The author has calculated energy fluxes in a system consisting of a helical waveguide within a coaxial metal cylinder with the interior of the helix filled with an anisotropic dielectric and the space between the helix and the cylindrical wall filled with a second anisotropic dielectric. Both dielectrics are assumed to be axially symmetric with the symmetry axis coinciding with the axis of the system. Both the dielectric tensor and the magnetic permeability tensor of both media are assumed to be anisotropic. Details of the calculation are not given, but the final formula for the ratio of the energy flux inside the helix to the energy flux outside the helix for the n -th space harmonic is written and results calculated from it for certain special cases for the zeroth space har-

Card 1/2

Card 2/2

KONDRAT'YEV, D. A.

PA 26/49T17

USSR/Electricity
Hydroelectric Plants
Oil Pressure

Aug 48

"Oil-Pressure Relay for Mills," D. A.
Kondrat'yev, G. A. Pasynkov, Engr, 1 p

"Elek Stants" Vol XIX, No 8

Describes initiative displayed at hydroelectric-power station where the technical staff perfected automatic oil-pressure regulator to control oil supply for type Sh-8 and Sh-16 coal mills. Includes sketch of apparatus.

26/49T17

KHROMOV, S.I.; KONDRAT'YEV, D.A.; BALNEKOVA, Ye.S.; KAZANSKIY, B.A., akademik.

Contact transformations of 1, 1' - β dimethyldicyclohexyl in the presence of platinized carbon. Dokl. AN SSSR 109 no.1:109-112 J1-Ag '56.
(MIRA 9:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Dimethyldicyclohexyl)

66965
SOV/32-25-11-13/69

5(3) 5.5600

AUTHORS:

Kondrat'yev, D. A., Markov, M. A.,
Minachev, Kh. M.

TITLE:

Analysis of Mixtures of C_5 to C_7 Hydrocarbons by the Method of
Liquid - Gas Chromatography

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 11, pp 1301-1304
(USSR)

ABSTRACT:

A simple device with a microflame detector (Ref 1) designed for the analysis of paraffin hydrocarbons, naphthenes, aromatic, and some unsaturated C_5 to C_7 hydrocarbons has been developed. The construction of the dosing evaporator and the microflame detector was based on a device developed by B. A. Rudenko (Izvestiya AN SSSR, in the press). The detector is, in principle, a burner consisting of a capillary 1 mm in diameter, and is located at the upper output of a column 6 m long, and is connected to a Chromel-Alumel thermocouple (Fig 1: Scheme of the device). Data obtained with the detector are recorded by automatic recording potentiometer of the types PS1-01 or EPP-09 with a second PP potentiometer connected thereto. The hydrocarbons may be analyzed by means of a thermostat of the

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Analysis of Mixtures of C_5 to C_7 Hydrocarbons
by the Method of Liquid-Gas Chromatography

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SOV/32-25-11-13/69

type TS-15M¹ at constant or variable temperature. The best separating efficiency was reached when two columns (each 3 m long) were used, the one filled with diatomite brick chips (0.25 to 0.5mm) and tricresyl phosphate, and the other filled with diatomite brick chips and dioctyl phthalate. Separation was first effected at 15 - 20°C (for 15 minutes), and all normal and isoparaffin hydrocarbons C_5 to C_7 were separated from one another, whereafter temperature was raised to 85°C (1.5° per minute). Hydrogen was passed through the system with a rate of 60 cm³ per minute. The chromatogram of a 15-component (C_5 to C_7 hydrocarbon) mixture shows that all substances could be separated except for the pairs 2,3-dimethylbutane-2-methylpentane, cyclopentane-3-methylpentane, and cyclohexane-3-methylhexane. Results of an analysis of an artificial hydrocarbon mixture (Table 1) as well as with catalyzates at elevated temperature and hydrogen pressure (Table 2) are given. There are 3 figures, 2 tables, and 2 Soviet references. ✓

Card 2/3

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SOV/32-25-11-13/69

Analysis of Mixtures of C_5 to C_7 Hydrocarbons
by the Method of Liquid-Gas Chromatography

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii
nauk SSSR (Institute of Organic Chemistry imeni N.D.Zelinskiy
of the Academy of Sciences of the USSR) 11

Card 3/3

MINACHEV, Kh.M.; KONDRAT'YEV, D.A.

Poisoning of a platinum catalyst with thiophene under conditions of reforming. Khim.sera-i asotorg.sced.sod.v neft.i nefteprod. 3:345-352 '60. (MIRA 74:6)

1. Institut organicheskoy khimii AN SSSR.
(Petroleum—Refining) (Catalysis) (Thiophene)

MINACHEV, Kh.M.; ISAGULYANTS, G.V.; KONDRAT'YEV, D.A.

Poisoning of a platinum catalyst by thiophene under conditions of reforming. Report No.2: Use of thiophene containing the radioactive isotope S35. Izv.AN SSSR Otd.khim.nauk no.5:902-906 My '60. (MIRA 13:6)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo Akademii nauk SSSR.
(Thiophene) (Sulfur—Isotopes) (Platinum)

Investigation of the Poisoning of the
Platinum Catalyst by Thiophene Under
the Conditions of Reforming.
Communication 3. The Influence of Temperature and Hydrogen Pressure

S/062/60/000/007/012/017/XX
B004/B064

at 20, 30, and 40 atm and 425, 450, 475 and 500°C after 1 - 2 hours. No stabilization of the yield occurred at 10 atm and 450° and 475°C; the activity of the catalyst decreased steadily in the course of 20 hours. The stabilized yield increased with rising temperature (425 → 500°C) and decreased with rising pressure (20 → 40 atm). The specific surface of the deactivated catalyst decreases with increasing temperature, with pressure changes, however, it remains almost the same. A complete decomposition of thiophene occurs when both temperature and pressure rise. There are 2 figures, 2 tables, and 6 references:
5 Soviet and 1 US.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo
Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy
of the Academy of Sciences USSR)

SUBMITTED: January 8, 1959

Card 2/2

MINACHEV, Kh.M.; SMIRNOV, V.S.; KONDRAT'YEV, D.A.; LOGINOV, G.A.

Products of the dehydrocyclization of n-hexane and dehydrogenation
of cyclohexane obtained on an alumina-molybdenum oxide catalyst.
Izv.AN SSSR Otd.khim.nauk no.4:724-726 Ap '61. (MIRA 14:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Cyclohexane) (Hexane)

5.3700 2209, 1164, 1282

23590
S/062/61/000/005/005/009
B118/B208

AUTHORS: Shuykin, N. I. Tulupova, Ye. D., Polyakova, Z. P., and
Kondrat'yev, D. A.

TITLE: Catalytic dehydrochlorination of methyl chloro cyclohexanes
to methyl cyclohexenes

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh
nauk, no. 5, 1961, 858 - 863

TEXT: The purpose of the present study was: 1) To find the optimum con-
ditions for the photochemical chlorination of methyl cyclohexane. 2) To
study the conditions necessary for a smooth dehydrochlorination of a mix-
ture of methyl chloro cyclohexanes obtained by chlorination of methyl
cyclohexane, as well as of methyl chloro cyclohexanes synthesized from the
corresponding individual methyl cyclohexanols. 3) To determine the struc-
ture of methyl cyclohexenes obtained by catalytic dehydrochlorination.
The following four isomeric methyl chloro cyclohexanes (I-IV) and chloro-
methyl cyclohexane (V) may be theoretically expected in the photochemical
chlorination of methyl cyclohexane:

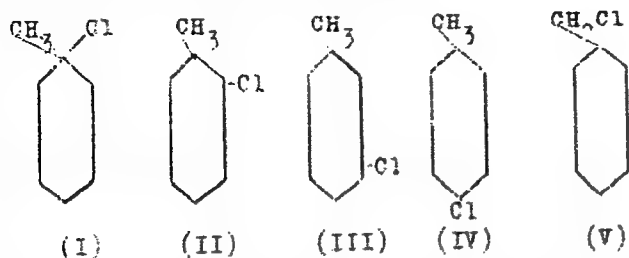
Card 1/4

23590

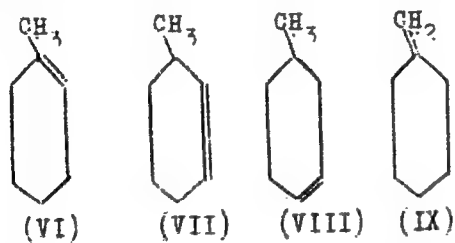
S/052/61/000/005/005/009

B118/B208

Catalytic dehydrochlorination...



Three isomeric methyl cyclohexenes (VI - VIII) and the methylene cyclohexane (IX) thus would be bound to result in the dehydrochlorination of this mixture.



Card 2/4

Mono- π -cyclopentadienyl...

23589
S/062/61/000/005/004/009
B118/B208

π -cyclopentadienyl compound to tetrapropoxy-titanium (C_3H_7O)₄Ti under mild conditions. Ethyl alcohol reacts similarly forming tetraethoxy-titanium (95 % yield) and cyclopentadiene (97 % yield, in the form of thallium cyclopentadienyl). To obtain mixed chloride alcoholates of π -cyclopentadienyl titanium, $C_5H_5Ti(OR)Cl_2$ and $C_5H_5Ti(OR)_2Cl$, π -cyclopentadienyl propoxy-titanium was allowed to react with acetyl chloride (1:2 and 1:1), where $C_5H_5Ti(OC_3H_7)Cl_2$ and $C_5H_5Ti(OC_3H_7)_2Cl$, respectively, resulted. The reaction products are green-yellow viscous liquids, not stable to atmospheric moisture, but stable when stored at 1 - 5°C. There are 11 references: 3 Soviet-bloc and 8 non-Soviet-bloc. The 4 references to English-language publications read as follows: C.L. Sloan, W. A. Barber, J. Amer. Chem. Soc. 81, 1364 (1959); M. A. Lynch, I. C. Brantley, Chem. Abstr. 52, 11126 (1958); A. K. Fischer, G. Wilkinson, J. Inorgan. Nuclear Chem. 2, 149 (1956); R. D. Gorsich, J. Amer. Chem. Soc. 80, 4744 (1958).

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental-Organic Compounds of the Academy of Sciences USSR)

Card 3/4

MINACHEV, Kh.M.; KONDRAT'YEV, D.A.

Effect of pressure, temperature, and thiophene concentration on the depth of dehydrogenation and isomerization of cyclohexane in the presence of platinum catalysts. Izv. AN SSSR. Otd. khim. nauk no. 5: 877-882 My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Cyclohexane) (Dehydrogenation)

S/062/61/000/009/009/014
B117/B101

AUTHORS: Minachev, Kh. M., Smirnov, V. S., Kondrat'ev, D. A., and
Loginov, G. A.

TITLE: Effect of thiophene on the catalytic activity of industrial
aluminum-molybdenum catalyst

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh
nauk, no. 9, 1961, 1669-1672

TEXT: The activity of an aluminum-molybdenum catalyst for pure hydrocarbons and hydrocarbons containing varying amounts of thiophene was studied, for the purpose of determining the deactivation rate of this catalyst and comparing the data found with data on poisoning of platinum catalysts. The sulfur content on the catalyst was determined by means of S^{35} tagged thiophene according to the method given in Ref. 3 (Kh. M. Minachev, G. V. Isagulyants, and D. A. Kondrat'yev, Izv. AN SSSR. Otd. khim. n. 1960, 902). All tests were carried out in an ordinary catalytic plant at normal pressure and in a hydrogen stream. Hydrocarbon purity was tested by gas-liquid chromatography. Cyclohexane and n-hexane, the hydrocarbons used for

Card 1/3

Effect of thiophene on the ...

S/062/61/000/009/014
B117/B101

the tests, were passed thru at a volume velocity of 0.2 hr^{-1} , at a molar ratio $\text{H}_2 : \text{HC} = 5 : 1$ (HC denoting the hydrocarbons). The tests lasted 6 to 45 hr. Data obtained in dehydrogenation of cyclohexane at 488°C and in dehydrocyclization of n-hexane at 500°C on the same catalyst have been reported in Ref. 5 (Izv. AN SSSR. Otd. khim. n. 1961, 724) and are used for comparison in the present work. Data obtained on dehydrogenation of cyclohexane containing 1.0, 1.5, 2.0, 3.0, and 5.0% by wt. thiophene show that the aromatizing effect of the catalyst decreases rapidly during the first few hours. After this, the deactivation rate slowly decreases. The degree of catalyst deactivation increases with increasing thiophene concentration. It was found that catalyst deactivation by the products of a radical degradation of cyclohexane is a much slower process than the decrease in aromatizing activity caused by thiophene. By comparison with platinum/alumina catalyst it was seen that the curves of catalyst poisoning and the dependence of catalyst activity on the thiophene concentration possess similar characteristics for both catalysts. In a test with cyclohexane containing 1.5% S^{35} -thiophene it was observed that increasing amounts of sulfur were deposited on the catalyst in the course of the process. After 20 hr work the catalyst had accumulated 1.6% of its own

Card 2/3

S/062/61/000/009/009/014
B117/B101

Effect of thiophene on the ...

weight in sulfur, that is 28.1% of the sulfur introduced into the system. The liquid portion of the catalyzate contained 7.9% sulfur and ~62.5% of the initial sulfur was liberated in the form of hydrogen sulfide. During dehydrocyclization of n-hexane containing 2.0% and 5.0% thiophene the aromatizing activity of molybdenum-alumina catalyst changes in the same manner as during dehydrogenation of cyclohexane containing thiophene. In the presence of thiophene the decrease in the yield of alkylated aromatic substances runs parallel to the decrease in benzene yield. The qualitative composition of the products obtained from cyclohexane and n-hexane in the presence of thiophene is practically the same as that of the products formed from the pure hydrocarbons under the same conditions and with the same catalyst. There are 4 figures, 2 tables, and 5 references: 4 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: R. W. Hummer, H. S. Taylor, J. Amer. Chem. Soc., 63, 2804 (1941).

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: January 2, 1961
Card 3/3

5.1140

11.0132

AUTHORS:

Minachev, Kh.M., Kondrat'yev, D.A., Slyunyayev, P.I.

TITLE:

Investigation by means of thiophene-S³⁵ of the poisoning of platinum-alumina catalysts containing various proportions of the metal

PERIODICAL: Kinetika i kataliz, v.2, no.5, 1961, 690-693

TEXT: Platinum-alumina catalysts are of a considerable practical importance in the petroleum industry and for this reason the authors carried out previously a series of systematic studies of the poisoning of these catalysts by sulphur during the dehydrogenation of cyclohexane at elevated temperatures (Ref.1, 2 and 3: Izv. AN SSSR, Otd. khim. n., 1960, 300; 1960, 902; 1960, 877). In the present article the results are given of further studies in the above series, the specific purpose of the work being to: 1. derive the relationship existing between Pt concentration in the catalyst mixture and the quantity of sulphur that must be deposited on the catalyst in order to inhibit its catalytic activity; 2. elucidate the distribution of sulphur in the catalyst layer and 3. correlate the degree of catalyst

Card 1/3

... was

33483

S/195/61/002/005/008/027
E040/E485

Investigation by means of ...

observed after passing the cyclohexane for the next 5 hours.
There are 3 figures, 1 table and 10 references: 9 Soviet-bloc and
1 non-Soviet-bloc. The reference to an English language
publication reads as follows: Ref.8: W.P.Hettinger, C.D.Keith,
J.L.Grign, J.W.Teter. Ind. Eng. Chem., v.47, 1955, 719.

ASSOCIATION: Institut organicheskoy khimii im. N.D.Zelinskogo
AN SSSR (Institute of Organic Chemistry imeni
N.D.Zelinskiy, AS USSR)

✓

Card 3/3

S/081/62/000/001/007/067
B156/B101

AUTHORS: Minachev, Kh. M. Isagulyants, G. V., Kondrat'yev, D. A.

TITLE: Investigation of the poisoning of a platinum catalyst, in reforming conditions, by thiophene containing the radioactive isotope S^{35}

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 73-74, abstract 1B540 (Sb. "Khimiya seraorgan. soyedineniy, soderzhashchikheya v neftyakh i nefteproduktakh, v. 4". M., Gostoptekhizdat, 1961, 160-165)

TEXT: The general laws for the poisoning of platinized Al_2O_3 containing 5% Pt by thiophene labeled with radioactive sulfur, when dehydrogenating cyclohexane in a flow system at an H_2 pressure of 20 atm and a temperature of $450^\circ C$, are studied. Radiochemical analysis enabled the sulfur content of the catalyst to be determined, this varying between 0.063 and 0.14% according to the concentration of thiophene in the initial mixture. The activity of

Card 1/2

MINACHEV, Kh.M.; SMIRNOV, V.S.; KONDRAT'YEV, D.A.; LOGINOV, G.A.

Effect of thiophene on the catalytic activity of the industrial
aluminum molybdenic catalyst. Izv. AN SSSR. Otd.khim.nauk
no.9:1669-1672 S '61. (MIRA 14:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Thiophene) (Catalysis)

MINACHEV, Kh.M.; KONDRAT'YEV, D.A.; SLYUNYAYEV, P.I.

Effect of thiophene on an aluminum-molybdenum catalyst under conditions of cyclohexane dehydrogenation under hydrogen pressure. Izv. AN SSSR. Otd.khim.nauk no.5:806-809 My '62. (MIRA 15:6)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Catalysts) (Dehydrogenation) (Cyclohexane) (Thiophene)

LEVITSKIY, I.I.; GONIKBERG, M.G.; MINACHEV, Kh.M.; KONDRAT'YEV, D.A.

Water promoted platinum-alumina catalyst. Report No.1:
Hydrogenation of benzene. Izv.AN SSSR.Otd.khim.nauk no.7:1169-
1174 J1 '62. (MIRA 15:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Benzene) (Hydrogenation) (Catalysts)

LEVITSKIY, I.I.; GONIKBERG, M.G.; MINACHEV, Kh.M.; KONDRAT'YEV, D.A.

Effect of water on the activity of alumina-platinum catalysts
with various metal content. Izv. AN SSSR. Ser. khim. no.11:
2065-2066 N '63. (MIRA 17:1)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

MINACHEV, Kh.M.; KONDRAT'YEV, D.A.; SLYUNYAYEV, P.I.

Effect of thiophene on the properties of Pd-, Rh-, Ru-, and Pt-Al₂O₃ catalysts under conditions of cyclohexane dehydrogenation. Izv. AN SSSR. Ser. khim. no.6:999-1003 '65. (MIRA 18:6)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

MINACHEV, Kh.M.; KONDRAT'YEV, D.A.; SLYUNYAYEV, P.I.

Effect of thiophene on the properties of alumina-platinum catalysts
under conditions of dehydroisomerization of methylcyclopentane. Izv.
AN SSSR. Ser. khim. no.7:1169-1174 '65. (MIRA 18:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

KONDRAT'YEV, D.F.; PODOLYAN, E.F.

Put under public control the distribution of technical
records to construction projects. Transp. stroi. 12
no.9:60 S '62. (MIRA 16:2)

1. Nachal'nik planogo-proizvodstvennogo otdela Kiyevgiprotransa
(for Kondrat'yev). (Construction industry)

FAYN, G.M.; KONDRAT'YEV, E.P.; DRABKIN, V.S.

Preparing light-alloy pipes for well drilling. Trudy VNIIBT
no.12:68-71 '64. (MIRA 18:4)

SHTAMBURG, V.F.; KONDRAT'YEV, E.F.; KUZNETSOV, G.I.; MELNIK, A.A.;
FAYN, G.M.

Drilling wells using light-alloy drilling pipes. Trudy
VNIIST no.12:72-92 '64 (MIRA 18:4)

KONDRAT'YEV, F.D.

Cancer as parasitic disease. Medych.shur.24 no.3:96-102 '54.
(NEOPLASMS, etiology and pathogenesis (MLRA 8:10)
parasitic factors)

L 15885-66 ENT(1)/RWT(m)/EEC(k)-2/ETC(f)/EPF(n)-2/ENG(m)/T/THP(t)/EWA(h) LJP(c)

ACC NR: AT6002494

SOURCE CODE: UR/3136/65/000/949/0001/0008

JD/WW/JG

AUTHOR: Kondrat'yev, F. V.; Sinyutin, G. V.; Tikhonov, V. F.

ORG: Institute of Atomic Energy im. I. V. Kurchatov, Moscow (Institut atomnoy energii)

TITLE: Effect of pile radiation on the performance of a cesium diode

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-949, 1965. Vliyaniye izlucheniya reaktora na rabotu tseziyevogo dioda, 1-8

TOPIC TAGS: cesium electron tube, nuclear reactor, volt ampere characteristic, diode electron tube

ABSTRACT: In connection with the practical applications of thermoemissive transducers which convert heat produced by nuclear reactors into electric energy, the authors studied the effect of a pile radiation field on the characteristics of a cesium diode. The measurements were made at cathode temperatures of 1500, 1700, and 2000C and cesium vapor pressure from 10^{-2} to several mm Hg. The VVR-2 pile of the Institute of Atomic Energy (Institut atomnoy energii) was used as the radiation source. It was found that the pile radiation field changes the volt-ampere characteristics of the diode, and that during the operation of the diode in Card 1/2

KONDRAT'YEV, P.V.

Schizophrenic process complicated by prolonged alcoholic intoxication.
Frak.sudebnopsikh.ekspert. no.3:32-40 '61.

(MIRA 17:10)

L 24218-65 EWT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Ps-4/Pu-4 DM
ACCESSION NR: AP5001288

142
S/0089/64/017/006/0463/0474 B

AUTHOR: Kurchatov, I. V. (deceased); Feynberg, S. M.; Dollezhal', N. A.; Aleshchenkov, P. I.; Drozdov, F. S.; Yemel'yanov, I. Ya.; Zhirnov, A. D.; Kazachenko, M. A.; Knyazeva, G. D.; Kondrat'yev, F. Ya.; Lavrenikov, V. D.; Morgunov, N. G.; Petunin, B. V.; Smirnov, V. P.; Talyzin, V. M.; Filippov, A. G.; Chikhladze, I. L.; Chulkov, P. M.; Shevelev, Ya. V.

TITLE: Pulse graphite reactor¹⁹ IGR

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 463-474

TOPIC TAGS: pulse graphite reactor, high neutron flux pulse, nuclear reactor

ABSTRACT: The paper is a summary of the SSSR #322a report at the International Conference on Peaceful Uses of Atomic Energy in Geneva, 1964. It represents an elaboration of the description of the pulse graphite reactor IGR given by S. M. Feinberg at the Second International Conference. The pulse reactors are used when a high neutron flux is desirable. The described reactor was in operation.

Card 1/2

L 24218-65

ACCESSION NR: AP5001288

tion for several years, and is still working without failure. Orig. art. has: 6 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 002

OTHER: 001

Card 2/3

KONDRAT'YEV, F.V.

Forensic psychiatric expertise in slowly developing schizophrenia.
Sud.-med. eksp. 8 no.3:44-49 J1-S '65. (MIRA 18:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy
psikhiatrii imeni Serbakogo (dir.- dotsent G.V. Morozov), Moskva.

KONDRAT'YEV, G. G.

Kondrat'yev, G. G. "On the problem of pyococcic sensitization," Trudy Krynok. med. in-ta im. Stalina, Vol. XII, 1948, p. 339-45

SO: U-3850, 16 June 53, (Letopsis 'Zhurnal 'nykh Statcy, No. 5, 1949)

KONDRAT'YEV, G. G.

Formalin therapy for tinea profunda of the scalp and face. Vest.ven.
i derm. no.2:54 Kr-Ap '55. (MLRA 8:5)

1. Iz kliniki koshnykh i venericheskikh bolezney Krymskogo meditsinskogo instituta im. Stalina.

(FORMALDEHYDE)

(SKIN -- DISEASES)

KONDRA'YEV, G.G.; VINOGRADOV, S.A.

Cutaneous lesions in lymphosarcomatosis. Vest. ven. i derm.
no.4:47-49 J1-Ag '55.
(MLRA 8:12)

1. Is kafedry koshno-venericheskikh bolezney (sav.-prof. G.G. Kondrat'yev) i patologicheskoy anatomii (sav.-prof. I.K.Yesipova) Krymskogo meditsinskogo instituta imeni I.V.Stalina.
(SKIN, neoplasms,
lymphosarcomatosis)
(LYMPHOSARCOMA,
skin)

KONDRAT'YEV, G.G.

AL'TMAN, R.I.; KONDRAT'YEV, G.G.

Gonorrheal ulcers in women. Akush. i gin. no.4:78-80 J1-Ag '55.

1. Iz kliniki koshnykh i venericheskikh bolezney (zav.prof.
G.G.Kondrat'yev) Krymskogo meditsinskogo instituta imeni I.V.
Stalina.

(GONORRHEA, compl.

lesions of female genitalia, diag.)

(GENITALIA, FEMALE, dis.

gonorrheal lesions, diag.)

KONDRAT'YEV, G. G.; VALIAYEVA, Z. F.

Decoction from eucalyptus leaves for treating skin diseases. Vest. ven
i derm. no. 5:53 8-0 '55. (MIRA 9:1)

(SKIN-DISEASES)
(EUCALYPTUS)

KONDRA'T'YEV, G.G., prof.

Significance of nonspecific sensitization in the development of experimental staphyloiderma. Vest.derm. i ven. 33 no.3:12-14 My-Je '59. (MIRA 12:9)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. G.G.Kondrat'yev) Omskogo meditsinskogo instituta imeni M.I. Kalinina.

(ALLERGY, exper.

Arthus phenomenon in staphyloiderma in rabbits (Rus))

(PYODERMA, exper.

same)

(MICROCOCCAL INFECTIONS, exper.

staphyloiderma, Arthus phenomenon in guinea pigs (Rus))

KONDRAT'YEV, F.V.

Difficulties in diagnosing slowly developing schizophrenia.
Prak.sudebnopsikh.ekspert. no.7:13-20 '62. (MIRA 16:2)
(SCHIZOPHRENIA)

KONDRAT'YEV, G.G.; POPOVA, F.M.

Organization of the prevention of mycoses of the foot under
industrial conditions. Vest.derm.i ven. 34 no.8:45-48 '60.
(MIRA 13:11)

1. Iz kafedry kozhnykh i venericheskikh bolezney (sav. - prof.
G.G. Kondrat'yev) Omskogo meditsinskogo instituta imeni M.I.
Kalinina.

(MEDICAL MYCOLOGY) (FOOT-DISEASES)

KONDRAT'YEV, G.G., prof. (Kazan')

"Reference book and methodological aid on infectious skin and
venereal diseases (for rural subprofessional medical personnel)
by B.D.Pletnev, V.P.Sergeev. Reviewed by G.G.Kondrat'ev. Fel'd.
i akush. 26 no.5:62-63 My '61. (MIRA 14:5)
(SKIN--DISEASES) (VENERAL DISEASES)
(PLETNEV, B.D.) (SERGEEV, V.P.)

KONDRAT'YEV, G.G.

Deep lupus erythematosus. Vest.derm.i ven. 35 no.1:83-84 Ja
'61. (MIRA 14:3)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof.
G.G. Kondrat'yev) Omskogo meditsinskogo instituta imeni M.I.
Kalinina.

(LUPUS)

KONDRAT'YEV, G.G., prof. (Kazan')

First All-Russian Congress of Dermatovenereologists; December 11-15,
1961 in Moscow. Kaz.med.zhur. no.3:99-100 My-Je '62. (MIRA 15:9)
(DERMATOLOGY--CONGRESSES) (VENEREOLOGY--CONGRESSES)

KONDRAT'YEV, G.G.; MUSTAYEV, R.K.

Clinical aspects of pemphigus. Sov. med. 28 no.5:136-141 My '65.
(MIRA 18:5)

1. Klinika kozhnykh i venericheskikh bolezney (zav. - prof. G.G.
Kondrat'yev) Kazanskogo meditsinskogo instituta.

KONDRAT'YEV, G. I.

"Some Anatomical Notes on the Vagotomy Operation," Vest. Khirurgii,
69, No.3, 1949

Chair Operative Surgery, Arkhangel'sk Med. Inst.

ELIZAROVSKIY, S.I.; KONDRAT'YEV, G.I.

Consideration on topography of ductus arteriosus. Khirurgia,
Moskva no. 2:13-17 Feb 1953. (CLML 24:2)

1. Professor for Yelizarovskiy. 2. Of the Department of Operative
Surgery (Head -- Prof. S. I. Yelizarovskiy), Arkhangel'sk Medical
Institute.

KONDRAT'YEV, G.I.; STUPNIKOV, S.Ya.; YELIZAROVSKIY, S.I., professor, zaveduyushchiy;
ORLOV, G.A., professor, direktor.

Topographo-anatomical relationship of the aorta and the pleura. Khirurgiia
no.6:39-44 Je '53. (MIRA 6:8)

1. Kafedra topograficheskoy anatomii i operativnoy khirurgii Arkhangel'-
skogo meditsinskogo instituta (for Yelizarovskiy). 2. Klinika obshchey
khirurgii Arkhangel'skogo meditsinskogo instituta (for Orlov).
(Aorta) (Pleura)

KONDRATU'YEV, G.I., kandidat meditsinskikh nauk; STUPNIKOV, S.Ya.,
kandidat meditsinskikh nauk

Topographical changes of mediastinal organs in some pathological processes of the thoracic cavity. Vest.khir.75 no.6: 94-98 J1 '55. (MLRA 8:10)

1. Iz kafedry operativnoy khirurgii (zav.--prof. S.I. Yelizarovskiy) i kafedry obshchey khirurgii (zav.--prof. G.A.Orlov) Arkhangel'skogo meditsinskogo instituta. Arkhangel'sk, ul. Karla Marksa, d.36, flig.1, kv.5.

(TUBERCULOSIS, PULMONARY, compl.

topographical changes of mediastinal organs)

(THORAX, anatomy and histol.

topographical changes of mediastinal organs caused by pulm.tuberc.)